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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,426	09/27/2001	Marcus C. Merriman	47097-01106USC1	4436

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EXAMINER

MADSEN, ROBERT A

ART UNIT PAPER NUMBER

1761

DATE MAILED: 05/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/965,426

Applicant(s)

MERRIMAN ET AL.

Examiner

Robert Madsen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-56, 76-86 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 38-56, 76-86 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 38-49,51,52,54-56,76-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodruff et al. (US 4522835) in view of Sorheim et al. (Meat Science 1999)and Stockley III et al. (US 5686127).

3. Regarding claims 38-49,51,52,54-56,76-86, Woodruff et al. teach treating and storing meat in a reduced oxygen modified atmosphere of 0.1-0.3% CO, along with 20-60% CO₂, 40-80% N₂, and 0% O₂ to convert deoxymyoglobin to carboxymyoglobin on the surface of the meat wherein the O₂ is removed by flushing, evacuation, or using a scavenger (Abstract, Column 1, line 63 to Column 3, line 30) as recited in claims 43-49,55,54,56,80-83,85,86. Woodruff et al. teach the meat remains in the modified atmosphere until sale or consumption, but are silent in teaching any particular package or method of packaging for sale or consumption as recited in claims 38 and 76.

4. Sorheim et al. are relied on as evidence of the conventionality of storing meat in a reduced oxygen/modified atmosphere *package* for sale/consumption comprising of 0.3-0.5% CO, along with 60-70% CO₂, 30-40% N₂, and 0% O₂ to form carboxymyoglobin (Page 157) and packaging in trays with shrink film (i.e. see 2.2. Packaging on page 158) wherein the oxygen is removed from the tray.

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5. Stockley, III et al. is relied on as evidence of a conventional reduced oxygen/modified atmosphere meat package for sale/consumption comprising two layers attached to the tray. Stockley III et al. teach providing a second peelable layer to the tray to provide a means to preserve the meat prior to display in a store. Stockley III et al. teach supplying a first polystyrene foam tray, sealing the tray with a first layer polyolefin overwrap, sealing a second layer onto the tray to form a pocket between the tray and second layer, or a pocket between the two films (i.e. with the drawstring embodiment of Figure 7) wherein the second layer is peelably removable for retailing without destroying the tray, and removing oxygen by flushing or by vacuum (Figures, Column 4, line 26 to column 6, line 5, Column 8, lines 23-31, Column 1, lines 40-62) as recited in claims 38-41, 43-47, 51, 52, 76-80, 84.

6. Therefore, it would have been obvious to modify the reduced oxygen/modified atmosphere storage of Woodruff et al. and store the meat in a foam tray sealed by first layer polyolefin overwrap with a second layer sealed onto the tray to form a pocket between the tray wherein the second layer is peelably removable for retailing without destroying the tray, and removing oxygen by flushing or by vacuum since Sorheim et al. teach it is known to store meat in a film sealed tray for sale/consumption using a reduced oxygen modified atmosphere comprising carbon monoxide and Stockley III et al. teach a conventional method and tray/overwrap package with a peelable layer suitable for storing meat in a reduced oxygen modified atmosphere prior to sale. Thus one would have been substituting one type of storage for another for the same purpose: storage of meat for sale/consumption in a reduced oxygen modified atmosphere.

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7. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woodruff et al. (US 4522835) in view of Sorheim et al. (Meat Science 1999) and Stockley III et al. (US 5686127) as applied to claims 38-49, 51, 52, 54-56, 76-86 above, further in view of Koch et al (US 3459117)

8. Regarding claim 53, Woodruff et al. teach converting deoxymyoglobin to carboxymyoglobin prior to adding the carbon dioxide mixture (column 3, lines 11-24) and requires a holding step to convert the oxymyoglobin, but are silent in teaching converting oxymyoglobin directly to carboxymyoglobin (Examples). Koch et al. are relied on as evidence of the conventionality of converting oxymyoglobin directly to carboxymyoglobin by treating a fresh cut of meat immediately with the modified atmosphere comprising carbon dioxide without an extra holding step (Column 1, lines 14-20, Column 3, lines 18-52). Therefore to convert oxymyoglobin directly to carboxymyoglobin since by doing so one would be able to eliminate a process step (i.e. conversion the oxymyoglobin) which, when dealing with mercantile packaging process, is advantageous to save money and time.

9. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woodruff et al. (US 4522835) in view of Sorheim et al. (Meat Science 1999) and Stockley III et al. (US 5686127) as applied to claims 38-49, 51, 52, 54-56, 76-86 above, further in view of Verbruggen (DE1935566). Woodruff et al. are silent in teaching the atmosphere consists of carbon monoxide and carbon dioxide. However, Verbruggen teaches a gas mixture consisting of carbon dioxide and carbon monoxide after vacuum treatment preserves meat color (English Abstract). Therefore it would have been

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obvious to modify the gas composition of Woodruff et al. to contain only carbon dioxide and carbon monoxide since one would have been substituting one modified atmosphere composition for another for the same purpose.

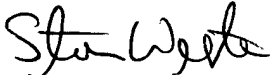
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (703)305-0068. The examiner can normally be reached on 7:00AM-3:30PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (703)308-3959. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0061.

Robert Madsen 
Examiner
Art Unit 1761
April 24, 2003


STEVE WEINSTEIN
PRIMARY EXAMINER 1761
for M. Cano